

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): James Stasiak et al

Confirmation No.:

Application No.: Unassigned

Examiner: Unassigned

Filing Date: Herewith

Group Art Unit:

Title: Nanometer-Scale Semiconductor Devices And Method Of Making

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e)(1) or (2), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. **EL780516007US**

Date of Deposit 09-22-03

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231

By Donald J. Coulman

Typed Name: **Donald J. Coulman**

Respectfully submitted,

**James Stasiak et al**

By Donald J. Coulman

**Donald J. Coulman**

Attorney/Agent for Applicant(s)  
Reg. No. **50,406**

Date: 09-22-03

**PATENT APPLICATION**

Sheet 1 of 4

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO. <b>100201346-5</b>	APPLICATION NO.	CONFIRMATION NO.
APPLICANT <b>James Stasiak, et al</b>			
FILING DATE <b>Herewith</b>			
GROUP			

**REFERENCE DESIGNATION                      U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	5772905	Jun 30, 1998	Chou	
	1B	6069380	May 30, 2000	Chou, et al	
	1C	6103540	Aug 15, 2000	Russell, et al	
	1D	6165911	Dec 26, 2000	Calveley	
	1E	6190929	Feb 20, 2001	Wang, et al	
	1F	6197641	Mar 06, 2001	Hergenrother, et al	
	1G	6248674	Jun 19, 2001	Kamis, et al	
	1H	2002/0008280	Jan 24, 2002	Armocost, et al	
	1I	6348388	Feb 19, 2002	Faltermeier, et al	
	1J	6375870	Apr 23, 2002	Visovsky, et al	
	1K	2002/0060338	May 23, 2002	Zhang	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	1L					
	1M					
	1N					
	1O					
	1P					

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

	1Q	Vieu-C et al. "Electron beam lithography, resolution limits and applications", 'Surface Science in Micro- and Nanotechnology', Applied Surface Science vol.164, pages 111-17, Sept 01, 2000
	1R	Hirai-Y et al. "Nano-imprint lithography for single electron tunneling devices using novel mold" Japan Soc. Appl. Phys., IEEE Electron Device Soc., In pages 122-123, 1999
	1S	Hirai-Y et al. "Novel mold fabrication for nano-imprint lithography to fabricate single-electron tunneling devices", Japanese Journal of Applied Physics- Part-1, vol 38, No. 128, pages 7272-7275 Dec 1999

EXAMINER

DATE CONSIDERED

FORM PTO-1449

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	2A	4272744	Jun 09, 1981	Schuegraf	
	2B	5138408	Aug 11, 1992	Ando	
	2C	5285081	Feb 08, 1994	Ando	
	2D	5475341	Dec 12, 1995	Reed	
	2E	5937295	Aug 10, 1999	Chen, et al	
	2F	5990516	Nov 23, 1999	Mamose, et al	
	2G	6090666	Jul 18, 2000	Ueda, et al	
	2H	6103540	Aug 15, 2000	Russell, et al	
	2I	6128216	Oct 03, 2000	Noble, Jr., et al	
	2J	6153534	Nov 28, 2000	Long, et al	
	2K	6168979	Jan 02, 2001	Kim, et al	

## FOREIGN PATENT DOCUMENTS

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	2L					
	2M					
	2N					
	2O					
	2P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	2Q	Hirai-Y, et al "Nano chamber fabrication on acrylic plate by direct nano imprint lithography using quartz mold", 2001 Int'l conference. pages 104-105 ✓
	2R	
	2S	
EXAMINER		DATE CONSIDERED

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EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	3A	6248674	Jun 19, 2001	Kamins, et al	
	3B	6256767	Jul 03, 2001	Kuekes, et al	
	3C	6261938	Jul 17, 2001	Kuekes, et al	
	3D	6264450	Sep 25, 2001	Chen, et al	
	3E	6319566	Nov 20, 2001	Polanyi, et al	
	3F	6375870	Apr 23, 2002	Visovsky, et al	
	3G	6518156	Feb 11, 2003	Chen, et al	
	3H	6518189	Feb 11, 2003	Cou	
	3I	6534414	Mar 18, 2003	Wang, et al	
	3J	6544846	Apr 08, 2003	Ahn, et al	
	3K	6559648	May 06, 2003	Baumgaertl, et al	

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	3Q	
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	3S	

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**PATENT APPLICATION**

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	4A	HO001570	Aug 1996	Lux, et al	
	4B	6559468	May 06, 2003	Kuekes, et al	
	4C				
	4D				
	4E				
	4F				
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